

## Beetles in Toad Faeces

A large toad *Bufo bufo* L. resided for the whole of the summer of 1993 under a flat metal sheet lying on the surface of a vegetable garden in Blackford, Edinburgh (O.S. Grid reference NT2571, VC83). Prior to moving to hibernation quarters in October 1993 this toad produced a single large faecal stool. After rearing some sphaerocerid flies from the stool (Bland, K.P., 1995, *Dipterists Digest* 2 (second series):12), the insect remains in the faecal material were studied. Some indication of the prehibernation binge indulged in by this toad can be gathered from the following list of insect remains:

### COLEOPTERA

#### Carabidae

*Leistus fulvibarbis* Dejean – 1 pronotum, 1 right elytron

*Nebria brevicollis* (Fabricius) or *N. salina* Fairmaire & Laboulbene – 1 pronotum, 1 elytron, 1 abdomen

*Agonum dorsale* (Pontoppidan) – 1 elytron

#### Staphylinidae

*Philonthus decorus* (Gravenhorst) – a few abdominal sclerites.

?*Staphylinus brunnipes* Fabricius – 1 elytron

*S. globulifer* Fourcroy – 5 heads, 3 right & 5 left elytra, 8 pronota

*S. olens* Müller, O.F. – 7 heads, 9 right & 9 left elytra, 8 pronota, 2 aedeagi

?*Creophilus maxillosus* (Linnaeus) – one abdominal sclerite

*Quedius tristis* (Gravenhorst) – 2 heads, 9 elytra, 1 aedeagus

Also numerous bits and pieces of one or more small/medium-sized species of ?*Quedius*, but it was not possible to be more precise.

#### Curculionidae

*Otiorhynchus singularis* (Linnaeus) – 1 pronotum, 1 elytron, 1 abdomen

*Phyllobius* sp. – 1 head

Also numerous unidentifiable fragments of assorted thoracic appendages of coleopterous origin.

### DIPTERA

2 heads of unidentified species.

The nine large Devil's Coach-horses *Staphylinus olens* must have accounted for 30-40% of the bulk of the insect food that was eaten to produce the faecal material from which these remains were taken. The poor toad must have had some intestinal discomfort passing such a substantial faecal stool. In total fragments were present of a minimum of 33 insects. All the species recorded are quite common, although *Leistus fulvibarbis* is less common than the others.— K.P. BLAND, National Museums of Scotland, Chambers Street, Edinburgh EH1 1JF and M. SINCLAIR, Gipnigoe, Main Street, Denholm, Roxbs. TD9 8NU.